Armament Truce and \$5,000,000,000 Saved!



pro and con in the question of world disarmament and an armament truce is not the purpose of this article. Its purpose is to call at-

tention to a by-product of the world-wide discu-sion of the disarmament and armament truce proposais-what the United States needs in the way of industrial improvements to increase its efficiency.

Engineers, efficiency experts, transportation managers and far-seeing business men have had much to say in a general way about the need for greater production and better distribution. The possibility of disarmament or of an armament truce has stimulated them to estimating what the United States would save and suggesting what it should do with the money thus saved.

Here is an example of the many suggestions for increased industrial efficiency. The United States geological survey has been making an investigation of the potential water power of the East. On the basis of its findpgs, Secretary of the Interior Payne, ust before going out of office, submitted to President Wilson a report covering the area from Boston to Washington. He urged unified development of electricity, supplied from of about 25,000,000 tons of coal, 12,000 miles of railroad, light cities, run street cars, factories and mines. through the concerted development of Raquette, Delaware, Susquehanna, Potomac rivers and streams in the Adi-

Financial feasibility of the idea is urged by the report on the following estimates:

Electrification of 12,000 miles of railway at gross cost of \$800,000,000. reduced to \$656,000,000 by salvage of steam locometives, while yearly savings on coal and maintenance "would return approximately 14 per cent on the investment."

Incomplete data on 50,000 power using plants indicates saving of 6,000,-000 to 8,000,000 tons of coal a year.

Electrification of hard coal mines to save 6,500,000 tons of coal yearly. Public utilities to be saved 4,000,000 tons of coal annually at average cost of \$3.50 a ton.

United States would save five billion truce and proceeds to tell what the nation could do with those five billlons, Writing in the New York

Gulf-roads connecting all the prin- overburden. cipal cities and towns in all the main or \$1,000,000,000 for 25,000 miles.

second year we could build the pro- St. Lawrence into Lake Ontario. This whose homes would be the security for posed intercostal ship and barge canal plan would at one stroke make Buffalo, its return. A very large proportion from Boston to Florida, running Cleveland, Toledo, Detroit and Chica- of the expenditure would go to pay for through Long Island Sound, crossing go seaport cities with ocean steamer labor, materials and transportation: Chesapeake Bay, thence running be- world. hind the chain of islands southward, "The utility and helpfulness of this of American business quickened."

THOUSANDS OF THIES OF CANALS holding an inland water course most | development is so vast as to outpace of the way.

But this development would not con- a measure for the benefit of the Unitsame our entire billion dollars. It ed States alone, nor merely for the would not require more than half joint benefit of the United States and of it. With the other \$500,000,000 we Canada; for it would be of incomparshould be able to dredge and deepen able benefit to the entire civilized to St. Louis, and the Missouri river to Kansas City, sufficiently to admit the In the Far West large tracts of arid free and unobstructed passage of lands have been redeemed and made ocean liners to the very center of the fruitful as farming districts through industrial and fruitful West.

"As to the third billion saved: For by the aid of the government in buildsome time past a great electrical su- ing the necessary dams to store water machinery, to effect an annual saving perpower system has been advocated, for the use of the farms, while the ran extending from Boston to Washing- electrical power developed by the waton, connecting with the bituminous ter as it is drawn from the reservoirs coal mines of Virginia, the anthracite for purposes of irrigation furnishes fields of Pennsylvania, and the the energy for lighting and transporsources of water power available at tation over large districts. Little has water power from the St. Lawrence, Niagara and in the lower reaches of yet been done, however, compared the St. Lawrence river. It is esti- with what remains undone." mated that 2,000,000 horse power may be developed on that part of the St. terior what could be done in the way Lawrence river between Lake Ontario of reclamation of the arid regions of and Montreal constituting the interna- the West for farming purposes by the tional boundary between that part of use of a billion dollars and I received New York state and Canada, one-half from that department a statement of which power would belong to the which I can do no better than to quote United States.

"The following is the proposition in a nutshell: Great hydro-electric power stations are to be built on the St. next ten years, this could be used to Lawrence and in the bituminous coal reclaim lands in the arid region at a mine section of Virginia and the an- cost of from \$100 to \$200 per acre thracite region of Pennsylvania. The electrical energy from these plants East and South at a cost of from \$75 will be conducted through trunk lines to \$125 per acre. Settlers could be crossing the super-power area, and placed on these lands and furnished the trunk lines will be tapped by with loans at low rates of interest on wires conducting the electricity away in all directions, to take the place of ment. The lands might be assumed Hudson Maxim assumes that the coal in all power plants, to run all lo- to be distributed as follows: comotives and street cars, to supply 2,000,000 acres of arid dollars through a five-year armament all electric lighting and to generate heat for much of the cooking and 4,000,000 acres of wet warming of rooms in private homes.

"At the present time the railroads World he says among other things: in the super-power area are carrying "A billion dollars would build in the about 60,000,000 tons of coal annually. United States 25,000 miles of concrete this coal constituting 40 per cent of roads 20 feet wide-five roads extend- the freight of the roads. It is estiing east and west from ocean to ocean, mated that half of this coal would be and six roads extending north and saved, or 30,000,000 tons annually, and south from Canada to Mexico and the the railrods relieved of their present 150,000 families and an equal number

"This is what we could do with the the towns and villages which would directions. The roads could be made fourth billion saved: A very practical spring up. The population supported 20 feet wide, of the best and most and comprehensive plan has already thereby would be about a million and substantial concrete construction, with been worked out for canalizing the St. a half and the values created would the liberal allowance of \$40,000 a mile, Lawrence river between Lake On- be more than double the expenditure. tario and Montreal, thereby permitting The money invested would all even-"With our billion dollars saved, the the passage of ocean steamers up the tually be returned by the beneficiaries. New Jersey to the Delaware, on to communication with all ports of the idle men and idle industries would

Habits of Our Feathered Friends birth. The inscription on the alumi-Discovered by American

Trace Birds by

Banding Society.

Incredible Wing Mileage Is Revealed

in Some of the Reports-New Facts About Domestic Relations of Jenny Wren and Husband.

New York .- The habits of birds, the ge they attain, the dispersal or disribution of their young, their mating ustoms, the strength of the homing nstinct, the consistency with which migrant bire's return to given areas in their winter range, routes followed by individual birds, and even polygamy -these and countless other problems the American Bird Banding association seeks to solve by methods that leave no opportunity for questioning the accuracy of the date.

The several hundred members of the association have for 12 years been conducting their research on a large scale in the western hemisphere, and European societies whose aims are identical with those of the American workers have been operating since 1898. These bodies of investigators pursue their experiments by the use of rings, bands of tags, each bearing an inscription or return address and a serial number. The bands are usually made of aluminum and are manufactured in about a dozen different sizes to fit the legs of all birds, from the smallest warbler to the clumsy pelican and the mighty eagle.

Fifty-eight thousand of these bands have so far been made for the American Bird Banding association, and approximately 20,000 have been placed by members on the legs of native wild irds. Each ring is stamped with the words, "Notify Am. Museum, N. Y.," and following this, or on reverse side of the band, is a serial number. At the time the band is placed on the bird the bander records on a standard file card all information relating to the operation. These data include the number of the band, the name of the bird, its age (whether nestling, fledgling or adult), locality, date, name of bander and remarks. The bird, having been thoroughly "catalogued," is sent on its way.

Long Migrations Recorded. Workers for the association have carried bands into the remotest regions. As memoers of scientific and exploring parties they have placed the the magic of irrigation accomplished tags on birds in Alaska, Greenland, Labrador, and even in the antarctic a thousand miles from Cape Horn. A young robin, banded in its nest on the After Two Years' Research Musician lonely shores of Great Slave lake, in | Claims Remarkable Results From the Northwest territory of Canada. has been reported from Louisiana, more than 2,000 miles away; a Massachusetts tern, or sea swallow, has been recovered a similar distance from its birthplace, in the waters off "I asked the Department of the Inthe Venezuelan coast, and a chimney swift, a bird less than six tuches long, has been recorded at its New Hampshire summer home after three seasonal journeys to South America, involving almost incredible wing mile-

> having been 18,000 miles, Aside from the birds which are systematically trapped, wild birds, either dead or alive, fall into human hands home?' Say, you know, that's the in a variety of ways.

turned in his been produced by a com- nurse her baby." mon crow, which was banded in the shot while stealing chickens on the

num band worn by this bird is as galow" with a bracelet on his leg. but legible today as it was when received from the maker, notwithstanding the all weather conditions. One of the most astounding details of bird life approximately 400, or 2 per cent, have six years of rough treatment under 20,000 ALREADY ARE MARKED brought out by banding has to do with the domestic relations of Jenny Wren and her songful husband.

Wren Is Fickle.

Wrens habitually raise two large families in rapid sequence each season, and in these circumstances it would naturally be thought the head of the establishment would give his uninterrupted attention to his household. Not so, however, with an Ohio house wren, who, the moment his first hatch of offspring was on the wing. ruthlessly abandoned his little brown wife and, moving off less than a hundred yards, reared hts second family with a newly found mate. This abominable fickleness might never have been suspected had it not been for

Here's Another Peril in "Hitting Bottle"

Winchester, Vn.-The art of drinking from a bottle is being lost in this vicinity. E. Clurence Smith of Berkeley county entertained a party of men friends at an old-time "pitch" party, at which bottled pop was served. One of Smith's guests had not gurgled anything for so many years that when he went about it in the old-time way the suction fastened the mouth of the bottle tightly to his lips and it could not be removed.

Finally one of the guests procured a feather and tickled his friend under the nose, provoking a laugh, which broke the con-

the numbered rings used on all of the characters involved.

Another house wren with a history is the "little old woman who lived in Use of Anklets a shoe." She and her furshand and their 13 children (rearred in two in stallments) were all banded. No work a shoe." She and her bushand and stallments) were all banded. No word has ever been heard from the children since they left home, but a year later a wren was seen at the old "shoe bunno mate was near. The observer is left wondering if perhaps there is not a wren Reno somewhere in the South. so far been heard from, and additional recoveries are being received from time to time.

PHYSICAL PERFECTION



In John J. Walkins of Dorchester, Mass., the civil service examiners believe they have found a perfect man, physically. This former heavyweight hoxing champion of the U. S. S. Mt. Vernon romped from machine to mischine, making a strength test record of 100 per cent.

Old Almanac.

Burlington, Kan .- W. W. Richards of Lebo believes he is the possessor of the oldest almanac in Kansas. His almanac was printed in 1701, thus being 220 years old. It was printed in Welsh by Thomas Jones.

Insane May Be Cured by Music

Pianist Boguslawski Evokes First Response From Many Stuporous Patients.

DOCTORS WATCH EXPERIMENT

Music in Arousing Patients From Mental Stupor.

Chicago, March 19.-The Italian worman sat huddled in the corner, her thin shoulders shaking. The color came to her bleached skin. She worked her fingers over her face, over the walls; she tore frantically at her fingers with her teeth. The intermezzo of "Cavalleria Rusticana" ended. The woman kneeling in the corner, age, the minimum distance covered Adeline M., sagged down, A nurse leaned over her and remarked:

"She says: 'Oh, my baby! Baby needs a mother. When any I going first time she's spoken since they The longest period record thus far brought her here. She refused to

Moissaye Boguslawski, Russian plannest at Berwyn, Pa., May 17, 1914, and ist, who is now living in Chicago, fingered through the "Miserere" from sixth anniversary of the date of band- "Il Trovatore." Shudders crept over ing, May 17, 1920, at Phoenixville, Pa., the Italian woman in the corner and only eight miles from the site of its she wept. The tears sped down her

face. She weaved her head from side 'o side.

"To", yes," she mouned, "I have a Leart-everybody is happy-babyfather-oh, don't forget me." And she vibrated to the rush of the music, while her mouth twisted into a grotesque smile

Tries Music as Aid to Insane. It was at the state hospital for the

insane in Dunning. Surrounded by the "stuporous," or depressed types of insane patients, Mr. Boguslawski sat at a plane running through the emotional gamut of music. A small audience of alienists watched the experi-

Can insanity be cured through music? After two years of research. Mr. Boguslawski claimed remarkable results from music on such cases. He has been performing experiments at the Dunning institution, it is said, for the last month. He has been holding weekly "musical clinics."

Psychiatrists and health department officials, as well as Chicago physiclans, are watching the experiments at Dunning. At each "music therapeutics" test, as Mr. Boguslawski has named his psychiatric process, Dr. D. B. Rotman of the hospital staff has collected data for presentation to the American medical profession for discussion.

"These experiments are the first of their kind ever conducted in the United States," said Dr. Rotman, "They are highly interesting. There is a universal potency to music; it appeals to the subtler elements of the mind. Patients long considered dult are aroused by this music to the expression of emotional display. The effect on that Italian woman, for instance, was overwhelming. Now we have found a response, she may be curable '

A Revelation, Says Official. "This is a revelation to me," ex-

claimed Dr. E. A. Foley, assistant superintendent of the institution, watching the planist endeavor to arouse the patients from their mental torpor with many varieties of mel-

"I have studied this for two years; I know it will work," replied Mr. Boguslawski. "I don't claim to be able to cure insanity, but I can relieve much mental distress. Probably a third of the 190,000 insane in the United States can be greatly improved by 'music therapeutics.' "

One of the cases studied was Mary K., an Armenian refugee. She was made insane by war horrors. She saw her mother, father and brother slain before her eyes. The Chopin funeral march today brought her to her knees in mumbled prayer. Tragic memories apparently were revived. She fell on the floor, sobbing.

"Nostalgia," explained Bogustawski. "An intelligent approach. A relief through the caress of sympathetic music for pent-up desires, suppressions, imagined fears. Music is the scappel which help open the wound. After that it's a case for physicians, P.ot musicians,"

Actress Collects Shoes for Poor



inez Plunimer. New York actress, placed a barrel outside the theater and good there collecting old shoes from passers by for the poor of the city.

\$1,000,000,000 "This would furnish rural homes for would find homes and employment in be put in metion and the whole pulse

\$300,000,000

Ancestry of Moonfish.

that swim the seas is the great moon-"Mariposa." It is a broad, flat fish, pyrites a correspondent, almost as deep as long, with flattened sides, small, ing the antiquity of one of the most toothless mouth, and short tall. It lives in the open seas, reaching a weight of 400 pounds. Its flesh is rich, tender and toothsome, but no person is likely to faste it more than once. Holmes: "The essential of good health

the same place. The one living species into the average nome and you find of Lampris is not related to any other the inmates languid, disinclined to ex-One of the strangest of all fishes existing fish, constituting an order by itself. The extinct moonfish of the fish or Opah, called in California Miocene diatom beds may therefore stand as Lampris zatima. The specimen is one of great interest as showsingular of all living bony dshes.

> Fresh Air. Following is by Mrs. Andrew J.

as the fish seldom appears twice in is pure, fresh air and plenty of it. Go ertion and 'all tired out. The rouson this is so is that indoors we usually live in an atmosphere which lacks in life-giving oxygen and is charged with curbon dioxide, a poisonous gas continually being thrown off by each member of the household, together with disease germs that are seeking lodgment in constitutions in which the power of resistance to their inroads has been reduced to a minimum."

the imagination. This great work is not

"What about the fifth billion saved?

"'If the sum of \$10,000,000 could be

made available for expenditure in the

and wet and cut-over lands in the

long time for improvements and equip-

per acre 400,000,000

000 each 300,000,000

land at \$150 per acre.

cut-over land at \$100

150,000 farms on above

reclaimed land at \$2,-

here: